

## **GMISS**

## Maritime Domain Awareness Open Source Data Utilization

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## Acquiring and managing data

#### Cases and Law



Federal and state
Case law
Regulations
AG opinions
Rulings
Citation services
Secondary sources
Megan's Law

#### **Open Media**



Newspapers
Newsletters
Magazines
Trade journals
Transcripts
Wire services
Political information

#### **World Finance**



SEC documents Corporate profiles Market research Financials Demographic M&A information

#### **Public Data**



Names
Addresses
Criminal Data
Real Property
Marriage
Divorce records
Voter records
Assets
Credit information
Insurance information

#### **International Data**



World news
Country profiles
Business analysis
Country information
International profiles
Legal and regulatory
information

#### 25 + Watchlists



**US Patriot Act Politically Exposed Persons** World-Check database **OFAC List** United Nations Consolidated List **Terrorist Exclusion List Unauthorized Banking** List FinCEN 314(a) list (custom add) **Bureau of Industry and** Security List Canada's Office of the Superintendent of **Financial Institutions** (OSFI)

#### Total Storage:

Online Data Sources:

• Searchable Documents:

Searchable Records

Searches per Month:

Documents added per hour

• Daily User Sign-Ons:

• Web Page Views per Month:

1.2 Petabytes

35,272

4.2 Billion

40+ Billion

60+ Million

106,814

360,000+

351+ Million



## **Maritime Domain Awareness Capability Gaps**

Critical data requirements to secure the global maritime supply chain

"In order to support Maritime Domain Awareness (MDA) operations, the Navy needs an enterprise-level solution to collect, evaluate, and disseminate a wide variety of information to field units and other government agencies."

- SECNAV MDA memo

"The capability gaps below come from fleet operator input, MDA and communication systems requirement messages, national MDA implementation team analysis, experimentation objectives, and other documents:

- Lack of net assessment, fusion, and collaboration tools
- Lack of cross domain solutions for information sharing
- Lack of maritime information gathering and collection"

- Fleet MDA CONOPS



## **Data Policy**

"Lack of cross domain solutions for information sharing" - Fleet MDA CONOPS

Data Policy: The need for safe, secure and correct data sharing procedures

- MDA privacy and policy requirements
- Domestic and International data sharing processes and procedures



#### **KNOW YOUR DATA POLICY**

- Common data fusion platform with data policy/data sharing principals architected into the overall solution
- Communities of interest created to facilitate sharing within the US Navy and between the US Navy and other US Government organizations and coalition partners
- "Better information means better decisions."



## **Open Source Data Enrichment**

"Lack of maritime information gathering and collection" -Fleet MDA CONOPS

## Data: The need for reliable, accurate, and mission-critical content from domestic and international sources

- Maritime vessels
- Maritime businesses
- Merchant mariners and seafarers
- Bulk and containerized cargo
- Maritime infrastructure
- OTHER?? Social networking analysis/deep web mining

## The Data Supply Chain is Critical

- Establish providence
- There can be too much data, especially for analysts
- How do you spot the needle in the needle stack?
- "Put all of your money in more data"
- Who is Fishbutt? The wisdom of crowds?





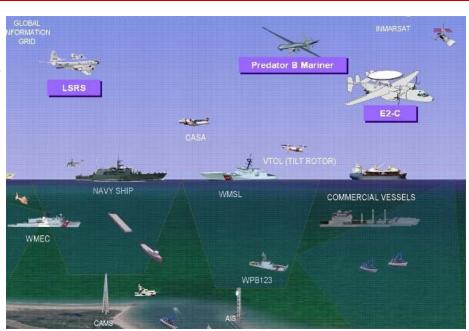


### **MDA Data Fusion**

"Lack of net assessment, fusion, and collaboration tools" -Fleet MDA CONOPS

# Data Fusion: The need to incorporate all relevant data sources for real-time anomaly detection and threat assessment

- Structured and unstructured data
- Archival data correlation and predictive analysis
- Disparate data and intelligence sources
- Custom algorithm development and integration into existing analytics tools

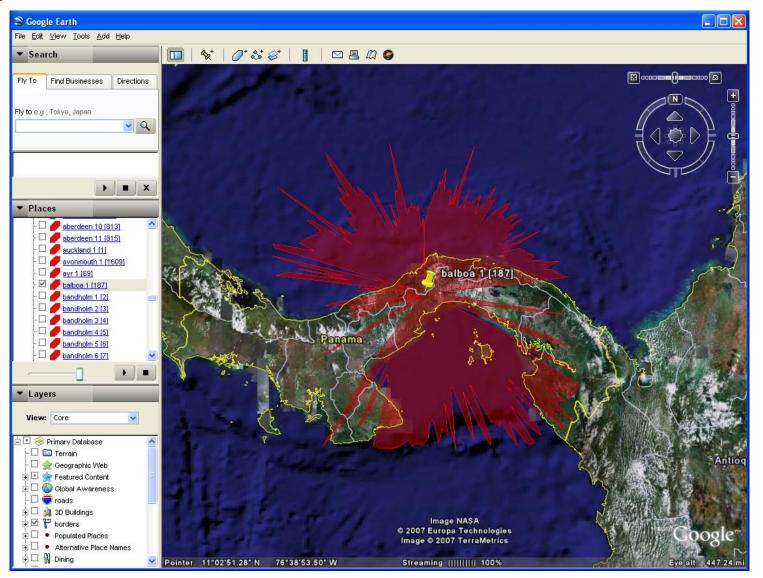


### The Power of Data Fusion

- Harness IT for data ingestion, cleansing, and analysis at data fusion centers
- Ensure that policies, procedures and security requirements built into the platform
- Link data fusion centers for ease of data sharing and policy coordination



# Not just having the data. How do you use the data?





## Meeting the needs of the global maritime supply chain

### **Learn from other enterprises**

- National Center for Missing and Exploited Children
- State and Local Law Enforcement fusion centers

### Set a thief to catch a thief

 Our opponents are operating in a non traditional, asymmetrical environment. Find like minded individuals and harness their approach



## Incentivize cooperation

- What value does commercial industry have in data sharing?
- How can the US Government incentivize cooperation?
- Don't just pay for data. Insurance?